DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES Office of Structural Materials Quality Assurance and Source Inspection

Bay Area Branch 690 Walnut Ave.St. 150 Vallejo, CA 94592-1133 (707) 649-5453 (707) 649-5493



Contract #: 04-0120F4

Cty: SF/ALA Rte: 80 PM: 13.2/13.9

File #: 1.28

WELDING INSPECTION REPORT

Resident Engineer: Casey, William **Report No:** WIR-027753 Address: 333 Burma Road **Date Inspected:** 11-Jun-2012

City: Oakland, CA 94607

OSM Arrival Time: 700 **Project Name:** SAS Superstructure **OSM Departure Time:** 1930 **Prime Contractor:** American Bridge/Fluor Enterprises, a JV

Contractor: American Bridge/Fluor Enterprises, a JV **Location:** Job site

CWI Name: As Noted Below **CWI Present:** Yes No **Inspected CWI report:** Yes N/A **Rod Oven in Use:** Yes No No

Yes N/A **Electrode to specification:** No **Weld Procedures Followed:** Yes No N/A N/A Yes **Qualified Welders:** Yes No **Verified Joint Fit-up:** No N/A N/A Yes No N/A **Approved Drawings:** Yes No **Approved WPS:**

Delayed / Cancelled: Yes No N/A

34-0006 **Bridge No: Component:** OBG/Tower

Summary of Items Observed:

Quality Assurance Inspector (QA) Rodney Patterson was at the American Bridge/Fluor (ABF) job site at Yerba Buena Island in California between the times noted above in order to monitor Quality Control functions and the in process work being performed by ABF personnel. The following items were observed:

OBG (13E Deck drop-in)

This QA observed ABF/JV welding personnel performing back gouging of weld 13E-PP122.5-E2.8-BF1. Due to an excessive gap the designed fillet was changed to a Complete Joint Penetration (CJP) with the approval of the engineer for a total of 260mm. The Quality Control (QC) Inspector Salvador Merino performed Magnetic Particle (MT) and visual confirmation of the excavation after it was ground to a bright finish. No indications observed to be present at the time of inspection.

The QA inspector observed ABF/JV qualified welder Steve Davis #7889 performing Shielded Metal Arc Welding (SMAW) in the 2G position implementing Caltrans approved Welding Procedure Specification (WPS) ABF-WPS-D1.5-1100. The joint being welded was the floor beam web to the floor beam flange splice at panel point 122.5 and is designated as 13E-PP122.5-E2.8-BF1. The repair surface and surrounding area was brought to temperature the use of a gas torch and the preheat temperature was confirmed by ABF personnel prior to welding. The Quality Control (QC) inspector Salvador Merino was noted monitoring the welding parameters at the beginning of the shift. The welding at this location was completed prior to the end of the QA inspectors shift.

This QA inspector noted and periodically observed ABF/JV personnel performing the final overhead grinding operations of the lift 13 East deck weld reinforcement between panel points 122~122.5 that was welded on an

N/A

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earlier shift. The QC inspector Salvador Merino was present in order to monitor the progression of work inspecting the grinding at the weld toe to ensure sufficient blending prior to final UT and MT inspection.

The QA inspector observed at random intervals ABF/JV qualified welder Richard Garcia #5892 performing Shielded Metal Arc Welding (SMAW) in the 3G position utilizing the Caltrans approved Welding Procedure (WPS) ABF-WPS-D1.5-1012-3. The welding observed was for the repair of the HPS485 longitudinal deck stiffener weld splice designated as LS13E/14E LS 7 and LS13E/14E LS 8. The repair surface and surrounding area was brought to temperature by the use of a gas torch and the preheat temperature was confirmed to be greater than 200°F by ABF personnel prior to welding. The repair welding was observed to be completed prior to the end of the QA inspectors shift.

The QA inspector periodically observed ABF/JV qualified welder Steve Davis #7889 performing Shielded Metal Arc Welding (SMAW) in the 3G position utilizing the Caltrans approved Welding Procedure Specification ABF-WPS-D1.5-1030. The welding observed was for the deck panel diaphragm web splice at panel point 122.5. The repair surface and surrounding area was brought to temperature by the use of a gas torch and the preheat temperature was confirmed ABF personnel prior to welding. The Quality Control (QC) inspector William Sherwood was observed monitoring the welding parameters at the beginning of the shift. The weld was completed from face "A" only during the QA inspectors shift and will require back gouging and final welding at a later date.

The QA inspector observed at random intervals ABF/JV qualified welder Richard Garcia #5892 performing Shielded Metal Arc Welding (SMAW) in the 1G position utilizing the Caltrans approved Welding Procedure Specification ABF-WPS-D1.5-1040A. The weld is a Complete Joint Penetration splice between the horizontal floor beam flanges at panel point floor 123 and is designated as 13E-PP123-E2.1-BF2 beam repair surface and surrounding area was brought to temperature by the use of a gas torch and the preheat temperature was confirmed by ABF personnel prior to welding. The welding at this location was observed to be completed prior to the end of the QA inspectors shift.

Ultrasonic Testing (OBG Lift 13/14 East)

This QA performed 100% Ultrasonic Testing (UT) on Complete Joint Penetration (CJP) deck drop-in splice HPS485 longitudinal deck stiffener weld splice designated as LS13E/14E LS 3. This weld was previously accepted by QC Ultrasonic technicians in accordance with AWS D1.5-2002, section 6, table 6.3. This QA observed no rejectable indications at the time of testing. This QA generated a TL-6027 UT report on this date.

Unless otherwise noted, all work observed on this date appeared to generally comply with applicable contract documents.

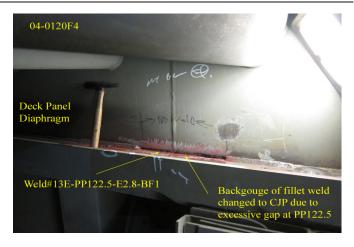
Summary of Conversations:

No relevant conversations.

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Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Nina Choy 510-385-5910, who represents the Office of Structural Materials for your project.

Inspected By: Patterson, Rodney **Quality Assurance Inspector** Levell,Bill **Reviewed By: QA** Reviewer